

CLAIMS

1. A coating system for in-situ coating of a surface comprising a dry powder composition which is dispersible in an aqueous applicator
5 the dry powder composition comprising calcium carbonate and, by weight, relative to calcium carbonate, from 4% to 11% of a polymeric binder, from 0.60% to 1.5% of a thickening agent and from 0.10% to 0.35% of a surfactant.
- 10 2. A coating system as claimed in claim 1 wherein the binder is an EVA binder.
3. A coating system as claimed in claim 1 wherein the surfactant is sodium citrate.
- 15 4. A coating system as claimed in claim 1 wherein the thickening agent is an inert mineral thickening agent.
- 20 5. A coating system as claimed in claim 4 wherein the inert mineral thickening agent is derived from Attapulgite.
6. A coating system as claimed in claim 1 wherein the binder is present in an amount of approximately 5% by weight relative to the calcium carbonate.
- 25 7. A coating system as claimed in claim 1 wherein the binder is present in an amount of approximately 10% by weight relative to the calcium carbonate.

8. A coating system as claimed in claim 1 wherein the surfactant is present in an amount of approximately 0.15% by weight relative to the calcium carbonate.
- 5 9. A coating system as claimed in claim 1 wherein the surfactant is present in an amount of approximately 0.30% by weight relative to the calcium carbonate.
- 10 10. A coating system as claimed in claim 1 wherein the thickening agent is present in an amount of approximately 0.63% by weight relative to the calcium carbonate.
- 15 11. A coating system as claimed in claim 1 wherein the thickening agent is present in an amount of approximately 1.26% by weight relative to the calcium carbonate.
12. A coating system as claimed in claim 1 including a preservative/biocide.
- 20 13. A coating system as claimed in claim 12 wherein the preservative/biocide is present in an amount of from 0.25% to 0.35% by weight relative to the calcium carbonate.
- 25 14. A coating system as claimed in claim 12 wherein the preservative/biocide is sodium benzoate.
15. A coating system as claimed in claim 13 wherein the preservative/biocide is present in an amount of approximately 0.30% by weight relative to the calcium carbonate.

16. A coating system for in-situ coating of a surface comprising a dry powder composition which is dispersible in an aqueous applicator medium, the dry powder composition comprising calcium carbonate and, by weight, relative to calcium carbonate, approximately 5% of a polymeric binder, approximately 0.63% of a thickening agent, approximately 0.15% of a surfactant and approximately 0.30% of a preservative/biocide.
17. A coating system for in-situ coating of a surface formed by a plurality of plasterboard sections comprising a dry powder composition which is dispersible in an aqueous applicator medium, the dry powder composition comprising calcium carbonate and, by weight, relative to calcium carbonate, approximately 10% of a polymeric binder, approximately 1.26% of a thickening agent, approximately 0.30% of a surfactant and approximately 0.30% of a preservative/biocide.
18. A method for preparing a dry powder composition as claimed in claim 1 comprising the steps of:
- preparing a premix comprising the surfactant, the thickening agent and the biocide/preservative; and
- adding the premix to at least part of the calcium carbonate and binder.
19. A method as claimed in claim 18 including the step of dry mixing at least a portion of the calcium carbonate with at least some of the

binder and adding the premix to the calcium carbonate/binder mixture.

- 5 20. A method as claimed in claim 19 comprising mixing approximately half of the calcium carbonate with the binder, adding the premix and subsequently adding the balance of the binder.
- 10 21. A method for preparing a coating composition for application in situ to a wall formed by a number of plasterboard sections comprising the step of mixing a dry powder composition as claimed in claim 1 with water.
- 15 22. A method as claimed in claim 21 wherein the dry powder composition is mixed with water in an amount of approximately 2 kg of coating composition per 1 litre of water.
23. A method as claimed in claim 21 including the step of adding a pigment to the mixture.
- 20 24. A method as claimed in claim 23 wherein the pigment is added in an amount of from 0.5% to 5% by weight relative to calcium carbonate.
25. A method of coating a surface formed by a plurality of plasterboard sections comprising applying a coating composition as claimed in claim 1.
- 25 26. A method as claimed in claim 25 wherein the coating composition is applied by a spray coating technique.

27. A method as claimed in claim 25 wherein the coating composition is applied by a roller technique.